DEWETRON

OXYGEN TRAINING
> SENSOR DATABASE

GENERAL PURPOSE

To minimize the effort for configuration of high channel count systems, OXYGEN offers a sensor database

Channel Settings for different settings can be defined and stored to the sensor database

Thus, the definition needs only be done once and can afterwards be applied to any hardware input channel

All settings to be selected in the Channel Setup are accessible in the sensor database

In case several identical sensors are used during a measurement, the general settings can be defined in the sensor database and applied to several different input channels

The sensor database can be found in System Settings → Sensors

Only analog sensors are supported, i.e. no Encoders yet

ADDING A SENSOR TO THE DATABASE

① Press the *Add* sensor button

② A new sensor will be created at the end of the list

③ Enter an appropriate name and an optional serial number of the Sensor

④ Press on the scaling column to enter the sensor specific scaling factor or sensitivity

⑤ Proceed with additional options listed on the right;
All fields are optional and can also be left blank if not required

APPLYING A SENSOR SETTINGS TO A CHANNEL

① Open the Channel Setup and press *Choose sensor*

② A popup will open with all sensors defined in the database included; Select the desired sensor and press ok

③ The settings will be applied to the Channel

④ In case some settings defined in the sensor database are not supported, a warning will appear but the other settings will be applied anyway

COPYING THE SENSOR DATABASE TO OTHER SYSTEMS

① The settings from the sensor database are stored to an xml-file called *sensor_db.xml* and can be found in the following directory: *C:\Users\Public\Documents\Dewetron\Oxygen*

② As the sensor database is based on a xml-file, the sensor database can also be generated and edited with an xml editor such as Notepad++

EXERCISE

Add the sensors with the following settings to the sensor database

① Accelerometer:
Name: Dytran 3097A2T
Serial No.: 00912
Sensitivity: 96.58 mV/g
Input mode: IEPE
Input Range: +/-0.3 V
Excitation: 4 mA
LP-Filter: Auto, 8th order Bessel
Coupling: 0.16 Hz

② Strain gage sensor
Input mode: Bridge
Wiring: 4-wire quarter bridge (350 Ω)
Input Range: +/-300 mV/V
Excitation: 10 V
LP-Filter: Auto, 8th order Bessel
Coupling: DC
K-factor: 2 µm/m